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“जानने का अधिकार, जीने का अधिकार”

Mazdoor Kisan Shakti Sangathan

“The Right to Information, The Right to Live”

“पुराने को छोड़ नये के तरफ”

Jawaharlal Nehru

“Step Out From the Old to the New”

IS 7298 (1973): Cotton Webbing, Proofed and Unproofed [TXD
12: Narrow Fabrics, Webbings and Braids]

“ज्ञान से एक नये भारत का निर्माण”

Satyanaaranay Gangaram Pitroda

Invent a New India Using Knowledge



“ज्ञान एक ऐसा खजाना है जो कभी चुराया नहीं जा सकता है”

Bhartṛhari—Nītiśatakam

“Knowledge is such a treasure which cannot be stolen”



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Indian Standard
SPECIFICATION FOR
COTTON WEBBING, PROOFED AND UNPROOFED

1. Scope — Prescribes the requirements of 3 varieties of cotton webbing, proofed or unproofed, dyed or undyed, suitable for general use as well as for use in guns and handles for ammunition boxes.

2. Manufacture

2.1 The webbing shall be manufactured from cotton yarn.

2.1.1 The webbing shall be woven plain. It shall be uniformly woven and reasonably free from weaving and finishing defects. The selvedges shall be firm and straight. Webbing may be grey (undyed) or dyed and may be either unproofed or proofed as required.

3. Requirements

3.1 The physical and chemical requirements shall be as specified in Tables 1, 2 and 3.

3.2 The webbing shall be made into full rolls of 50 ± 10 metres and shall be supplied without joints as far as practicable. The number of joints in full roll shall not exceed 3, subject to individual piece length being not less than 5 metres.

4. Marking — Each roll of webbing shall be marked with the following:

- a) Name of the material;
- b) Width;
- c) Length of webbing in a roll;
- d) Whether proofed or unproofed; and
- e) Manufacturer's name, initials and trade-mark.

4.1 ISI Certification Marking — Details available with the Indian Standards Institution.

5. Packing — An appropriate number of rolls of webbing shall be arranged in cylindrical bundles and secured with twine to form a pack. A suitable number of such packs shall be arranged and wrapped with kraft paper and placed over a layer of heavy cee cloth, or other equivalent hessian cloth and made into a bale.

6. Sampling and Criteria for Conformity

6.1 Unless otherwise agreed to between the buyer and the seller, the number of tests to be carried out for various characteristics shall be according to **6.1.1** and **6.1.2**. As far as possible only one test specimen may be drawn from each roll for testing for a given characteristic. The rolls shall be selected at random from a lot and to ensure randomness of selection, IS : 4905-1968 'Methods for random sampling', may be followed.

6.1.1 The number of tests for determination of various physical characteristics, namely, ends, picks, width, length, weight and breaking load shall be according to 3 of IS : 3919-1966 'Methods for sampling cotton fabrics for determination of physical characteristics'.

6.1.2 The number of tests for determination of various chemical characteristics, namely, pH value, ash content and water soluble matter content shall be according to 3 of IS : 5463-1969 'Methods for sampling cotton fabrics for chemical tests'.

6.1.3 The number of test specimen to be tested for water soluble chlorides, sulphates and water soluble matter shall be 3, if the lot consists of 15 or less bales and 5 otherwise.

6.2 Criteria for Conformity — For ascertaining the conformity of the lot to the physical and chemical requirements, the criteria for conformity as given in 5 of IS : 3919-1966 or IS : 5463-1969 respectively shall be followed.

TABLE 1 CONSTRUCTIONAL PARTICULARS OF COTTON WEBBING, PROOFED AND UNPROOFED

(Clause 3.1)

Variety No.	Width	Nominal Universal Count of Yarn (or Cotton Count)		No. of Folds	Ends per dm, Min	Picks per dm, Min	Finished Weight, Max	Breaking Load on Full Width × 20 cm, Min
		Warp	Weft					
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
	mm						kg/100 m	kgf
1	12.7±1.5	—	—	8	307	148	1.0	82
2	19.0±1.5	49 tex (or 12s)	27 tex (or 22s)	8	220	78	3.0	182
3	25.4±1.5	49 tex (or 10s)	49 tex (or 12s)	8	285	95	5.0	227

Method of Test	Appendix B of IS : 4727-1968*	—	—	—	5 of IS : 1963-1969†	Appendix B of IS : 3255-1965‡	8.1 and 9.1 to 11.4 of IS : 1969-1968§
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*Specification for nylon webbing for aeronautical purposes.

†Methods for determination of threads per decimetre in woven fabrics (first revision).

‡Specification for cotton tapes for parachutes.

§Method for determination of breaking load and elongation at break of woven textile fabrics (first revision).

TABLE 2 CHEMICAL REQUIREMENTS OF COTTON WEBBING, PROOFED AND UNPROOFED

(Clause 3.1)

Sl. No.	Characteristic	Requirement		Method of Test
		Unproofed	Proofed	
(1)	(2)	(3)	(4)	(5)
i)	pH value	Between 4.5 and 8.0	Between 4.5 and 8.0	IS : 1390-1961*
ii)	Water soluble chlorides	0.05 percent Max	0.05 percent Max	IS : 4202-1967†
iii)	Water soluble sulphates	0.25 percent Max	0.10 percent Max	IS : 4203-1967‡
iv)	Water extractable matter	2.5 percent Max	—	IS : 3456-1966§
v)	Ash content	1.5 percent and 0.5 percent after removal of water extractable matter	—	Clause 7 of IS : 199-1957

*Methods for determination of pH value of aqueous extracts of textile materials.

†Method for determination of chloride content of textile materials.

‡Method for determination of sulphate content in textile materials.

§Method for determination of water soluble matter of textile materials.

||Methods for estimation of moisture; total size or finish, ash and fatty matter in grey and finished cotton textile materials (revised).

TABLE 3 ADDITIONAL CHEMICAL REQUIREMENTS FOR COTTON WEBBING, PROOFED
(Clause 3.1)

Sl No.	Characteristic	Requirement	Method of Test
(1)	(2)	(3)	(4)
i)	<i>Where proofing is done with iron and chromium compounds:</i>		
a)	Iron and chromium calculated as Fe_2O_3 and Cr_2O_3 (cumulative)	1.5 percent Min	IS : 1039-1956*
b)	Water soluble chromate, calculated as Na_2CrO_4	0.1 percent Max	IS : 5449-1969†
c)	Chromium compounds calculated as Cr_2O_3 by extracting with 10% caustic soda [over and above water soluble chromates estimated as at (b) above]	0.07 percent Min	IS : 1039-1956*
d)	Ash content	3.0 percent Max	Clause 7 of IS : 199-1957‡
ii)	<i>Where proofing is done with copper naphthenate:</i>		
a)	Copper naphthenate calculated as CuO	1.0 percent Min	IS : 3522 (Part I)-1966§
b)	Ash content	2.5 percent Max	Clause 7 of IS : 199-1957‡
iii)	<i>Where proofing has been done with sodium pentachlorophenates:</i>		
a)	Sodium pentachlorophenate	0.5 percent Min	IS : 3522 (Part II)-1970
b)	Ash content	2.0 percent Max	Clause 7 of IS : 199-1957‡

*Methods for estimation of small quantities of copper, iron, manganese, chromium and zinc in proofed cotton fabrics (*tentative*).

†Methods for determination of water soluble chromate in textile materials.

‡Methods for estimation of moisture, total size or finish, ash and fatty matter in grey and finished cotton textile materials (*revised*).

§Method for estimation of common preservatives used in textile industry, Part I.

||Methods for estimation of common preservatives used in textile industry, Part II.